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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,381	01/15/2002	John M. Nestler		2253
7.	590 06/05/2003			
U.S. Army Corps of Engineers ATTN: CEHEC-OC (Kingman Building) Humphreys Engineer Center 7701 Telegraph Road Alexandria, VA 22315-3860			EXAMINER	
			SALDANO, LISA M	
			ART UNIT	PAPER NUMBER
,			3673	
			DATE MAILED: 06/05/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

		Applicati n No.	Applicant(s)				
Office Action Summary		10/045,381	NESTLER ET AL.				
		Examiner	Art Unit				
•	•	Lisa M. Saldano	3673				
	Th MAILING DATE of this communication app						
Period fo	or Reply						
THE I - Exte after - If the - If NC - Failu - Any I	ORTENED STATUTORY PERIOD FOR REPL' MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period or re to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time y within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE.	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. & 133)				
1)	Responsive to communication(s) filed on						
2a)□		— · iis action is non-final.					
3)	,—		osecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
	on of Claims						
·	4) Claim(s) 1-22 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.							
	Claim(s) is/are allowed.						
	☑ Claim(s) <u>1-22</u> is/are rejected.						
•	Claim(s) is/are objected to.						
	Claim(s) are subject to restriction and/o on Papers	r election requirement.					
	The specification is objected to by the Examine	r.					
	The drawing(s) filed on is/are: a)□ accep		miner.				
,	Applicant may not request that any objection to the	•					
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12) The oath or declaration is objected to by the Examiner.							
Priority u	ınder 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) ☐ All b) ☐ Some * c) ☐ None of:							
	1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents	s have been received in Application	on No				
* S	3. Copies of the certified copies of the prior application from the International Buree the attached detailed Office action for a list	reau (PCT Rule 17.2(a)).	•				
14) 🗌 A	cknowledgment is made of a claim for domesti	c priority under 35 U.S.C. § 119(e	e) (to a provisional application).				
) ☐ The translation of the foreign language pro Acknowledgment is made of a claim for domesting	• •					
Attachmen	t(s)						
2) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u>	5) Notice of Informal P	(PTO-413) Paper No(s) Patent Application (PTO-152)				
S Patent and Tr	ademark Office						

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DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

In the abstract, line 5, the disclosure states "fish...are converted to pet food." The remainder of the disclosure does not provide such limitations or functions. Please clarify.

On pages 7-8 of the disclosure, the brief descriptions of the drawings are not explained clearly.

On page 9, lines 5-12 of the disclosure, the applicant appears to have used "the z direction" where he may have meant to use "the y direction." Please clarify.

Appropriate correction is required.

Claim Objections

2. Claims 7, 9, 11, 12, 13, 15, 16 and 17-20 are objected to because of the following informalities:

Claim 7, line 3, contains a period in the middle of the line after "and combinations thereof". All claims should be a sentence long ending with a period.

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Claim 9, line 1 contains limitations regarding "said modules." However, prior language in the claims from which claim 9 depends from do not mention modules. This limitation does not have antecedent basis.

Claim 12, line 1 contains limitations wherein "at least one visual cue is precluded." This claim's language is not clear and does not set forth definitively what the applicant intends to claim.

Claim 15, lines 1 and 4 contain limitations regarding a "said wedge-shaped extension." However, prior language in the claims from which claim 15 depends from do not mention a wedge shaped extension. This limitation does not have antecedent basis.

Claim 17, line 2 claims limitation regarding "a path in the water..." However, "water" has not been mentioned in prior claim language. This claim should be further clarified.

Claim 20, lines 2 and 6, contains limitations regarding "at least one OH-SBC." However, prior language in the claims from which claim 20 depends from do provide a definition for "OH-SBC." This limitation does not have antecedent basis.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 1-22 are rejected as failing to define the invention in the manner required by 35
 U.S.C. 112, second paragraph.

The claim(s) are indefinite. The structure which goes to make up the device must be clearly and positively specified. It appears that the subject matter in the independent claims happen in naturally in nature. It is not clear what the applicant is claiming his/her invention to be. Appropriate action is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 6. As best understood, claims 1, 2, 7, 11, 17-19, 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Koch (4,437,431).

Regarding claims 1, 2, 7, 17, 21 and 22, Koch discloses a method and apparatus for diversion of migrating fish comprising a system that simulates a hydraulic cue for fish by forming increased stream flow in a body of water to the point where fish are carried in some manner around a barrier in the body of water, specifically a dam (see abstract). The body of

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water is a stream, which has a spillway S that is an intake for turbines for generating hydroelectric power located at T. The stream has both an upstream and a downstream side.

Regarding claim 11, as broadly claimed by the applicant, Koch's system is selected to operate at an optimum level with respect to the intake.

Regarding claims 2, 18 and 19, as broadly claimed by the applicant, the fish instinctively respond to the hydraulic cue formed by the increased stream flow, as they cannot retreat from it thereby minimizing strain rate variables with respect to the depth and width of the stream (see abstract).

7. As best understood, claims 1, 2, 7, 17-19, 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Chicha (5,632,572).

Regarding claims 1, 7, 17, 21 and 22, Chicha discloses a method and apparatus for guiding fish comprising a system that simulates a hydraulic cue for fish by providing a faster moving channel in a body of water to the point where fish instinctively tend to remain within the faster moving channel. The system is used to direct fish movement through small areas or large dam backwaters (see abstract and column 3, lines 50-56 and column 4, lines 24-34).

Regarding claims 2, 18 and 19, as broadly claimed by the applicant, the fish instinctively respond to the hydraulic cue formed by the faster moving channel thereby minimizing strain rate variables with respect to the depth and width of the stream.

8. As best understood, claims 1-3, 6, 7-11, 15, 17-21 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Johnson (6,467,997).

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Regarding claims 1, 7, 17, 21 and 22, Johnson discloses a method and system for diversion of fish around a structure comprising a system that simulates a hydraulic cue for fish by forming a flow scoop 34 in a body of water to the point where fish are carried in some manner around a barrier in the body of water, such as a dam 14 (see column 3, lines 60-65). The body of water is a stream, which has a dam 14 with a water intake 16. The stream has both an upstream and a downstream side.

Regarding claims 3 and 15, Johnson's system discloses a wedge-shaped frame 30 that functions as a collector having length, width, depth, a top, a bottom, an interior and an exterior surface wherein the frame is positioned adjacent and parallel to the upstream side of a barrier or dam 14 and wherein the top of the frame is generally parallel to the upstream side of the dam and the top of the frame is generally parallel with the surface of the body of water. Further, as broadly claimed by the applicant, Johnson's extension 34 is capable of eliminating a zone of dead water that may be adjacent the upstream side of the barrier.

Regarding claims 6, 8-10 and 20, Johnson's system discloses a frame 30 that comprises at least one panel 40, or module, wherein the panel is pivotably connected to the frame permitting adjustment of the collector to the upstream side of the dam.

Regarding claim 11, as broadly claimed by the applicant, Johnson's system is selected to operate at an optimum level with respect to the intake.

Regarding claims 2, 18 and 19, as broadly claimed by the applicant, the fish in Johnson's system instinctively respond to the hydraulic cue formed by flow scoop thereby minimizing strain rate variables with respect to the depth and width of the stream.

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Allowable Subject Matter

As best understood, claims 4, 5, 12-14 and 16 are objected to as being dependent upon a 9. rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's 10. disclosure. Warner et al (4,904,114) disclose a fish conveying apparatus. Safwat (6,347,908) discloses a fish guidance system. March et al (6,357,389) disclose a control system for enhancing fish survivability in a hydroelectric power generation installation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa M. Saldano whose telephone number is 703-605-1167. The examiner can normally be reached on Monday-Friday, 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather C. Shackelford can be reached on 703-308-2978. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

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lms May 30, 2003

> HEATHER SHACKELFORD SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3600